

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 4-7, 9-15, 17-22 and 24-27 are pending in the application, with claims 1, 6, 14 and 21 being the independent claims. Claims 3, 8, 16 and 23 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 2, 6, 7, 14, 15, 21 and 22 are sought to be amended. These changes introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Amendments to the Specification

Applicants have amended paragraphs [0002]-[0007] and [0009]-[0012] of the specification to update information included therein related to priority applications. Applicants have also amended paragraph [0016] of the specification to correct an error therein. Applicants have further amended paragraphs [0051], [0243], [0249], [0251] and [0271] of the specification to reflect the fact that FIG. 22 was split into two separate figures, namely FIGS. 22A and 22B, during preparation of formal drawings for the present application. None of these changes add new matter and their entry is respectfully requested.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-10 and 12-27 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,438,123 to Chapman ("Chapman"). Claims 3, 8, 16 and 23 have been cancelled by virtue of the foregoing amendment, thereby rendering the rejection of those claims moot. With respect to the remaining claims, Applicants respectfully traverse in view of the foregoing amendments and the following remarks.

Claim 1, as presently amended, is directed to a cable modem that includes:

a media access control;

a receiver portion coupled to said media access control; and

a transmitter portion coupled to said media access control;

wherein said media access control is adapted to generate a registration message that indicates support for a plurality of protocol-specific header suppression techniques by the cable modem and wherein said transmitter portion is adapted to transmit said registration message to a cable modem termination system;

wherein said receiver portion is adapted to receive a response to said registration message from said cable modem termination system and to provide said response to said registration message to said media access control, said response to said registration message indicating whether or not said plurality of protocol-specific header suppression techniques is supported by a cable modem termination system; and

wherein said media access control is further adapted to format data for transmission to said cable modem termination system in accordance with a selected one of said plurality of protocol-specific header suppression techniques if said response to said registration message indicates said plurality of protocol-specific header suppression techniques is supported by said cable modem termination system, and to format data for transmission to said cable modem termination system in accordance with a default header suppression technique if said response to said registration message indicates said plurality of protocol-specific header suppression techniques are not supported by said cable modem termination system.

Chapman does not teach or suggest each of the foregoing features of claim 1.

Chapman is directed to a DOCSIS-based cable modem network that allows only a single type of header suppression: namely, the suppression of Ethernet, UDP and IP headers in a flow of RTP packets corresponding to a Voice over Internet Protocol (VoIP) phone call. *See Chapman, col. 4, ll. 29-44.* In Chapman, this single type of header suppression is performed only if the cable modem termination system (CMTS) and a cable modem are both capable of performing it. Otherwise no header suppression is performed.

Consequently, Chapman does not teach or suggest a cable modem as recited in claim 1 that includes a media access control that is adapted to (1) "generate a registration message that indicates support for a plurality of protocol-specific header suppression techniques by the cable modem" and to (2) "format data for transmission to [a] cable modem termination system in accordance with a selected one of said plurality of protocol-specific header suppression techniques if [a] response to said registration message indicates said plurality of protocol-specific header suppression techniques is supported by said cable modem termination system, and to format data for transmission to said cable modem termination system in accordance with a default header suppression technique if said response to said registration message indicates said plurality of protocol-specific header suppression techniques are not supported by said cable modem termination system."

Since Chapman does not teach or suggest each and every feature of independent claim 1, it cannot anticipate that claim. Dependent claims 2, 4 and 5 are likewise not anticipated by Chapman for the same reasons as independent claim 1 from which they depend and further in view of their own respective features. Accordingly, Applicants

respectfully request that the rejection of claims 1, 2, 4 and 5 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent claim 6, as presently amended, recites a cable modem termination system that includes a receiver portion "adapted to receive a registration message from a cable modem . . . , said registration message designating support for a plurality of protocol-specific header suppression techniques or support for a default header suppression technique by said cable modem" and a media access control that is adapted to "process data transmitted by said cable modem during [an] allocated transmission opportunity in accordance with a selected one of said plurality of protocol-specific header suppression techniques if support for said plurality of protocol-specific header suppression techniques is indicated by [a] protocol indicator, and process data transmitted by said cable modem during said allocated transmission opportunity in accordance with said default header suppression technique if support for said default header suppression technique is indicated by said protocol indicator." As discussed above in regard to claim 1, Chapman is directed to a DOCSIS-based cable modem network that allows only a single type of header suppression or no header suppression and thus does not teach or suggest these features.

Since Chapman does not teach or suggest each and every feature of independent claim 6, it cannot anticipate that claim. Dependent claims 7, 9, 10, 12 and 13 are likewise not anticipated by Chapman for the same reasons as independent claim 6 from which they depend and further in view of their own respective features. Accordingly, Applicants respectfully request that the rejection of claims 7, 9, 10, 12 and 13 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent claim 14, as presently amended, recites a method for transferring data between a cable modem and a cable modem termination system in a cable modem system that includes "sending a registration message to the cable modem termination system, wherein said registration message indicates support for a plurality of protocol-specific header suppression techniques by the cable modem", "formatting data for transmission to the cable modem termination system in accordance with a selected one of said plurality of protocol-specific header suppression techniques if [a] response to said registration message indicates said plurality of protocol-specific header suppression techniques are supported by the cable modem termination system" and "formatting data for transmission to the cable modem termination system in accordance with a default header-suppression technique if said response to said registration message indicates said plurality of protocol-specific header suppression techniques are not supported by the cable modem termination system." As discussed above in regard to claim 1, Chapman is directed to a DOCSIS-based cable modem network that allows only a single type of header suppression or no header suppression and thus does not teach or suggest these features.

Since Chapman does not teach or suggest each and every feature of independent claim 14, it cannot anticipate that claim. Dependent claims 15 and 17-20 are likewise not anticipated by Chapman for the same reasons as independent claim 14 from which they depend and further in view of their own respective features. Accordingly, Applicants respectfully request that the rejection of claims 14, 15 and 17-20 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent claim 21, as presently amended, recites a method for data transfer in a cable modem system including a cable modem termination system and a cable modem that includes "receiving a registration message from a cable modem, wherein said registration message designates support for a plurality of protocol-specific header suppression techniques or support for a default header suppression technique by said cable modem", "processing data transmitted by the cable modem during said allocated transmission opportunity in accordance with a selected one of said plurality of protocol-specific header suppression techniques if support for said plurality of protocol-specific header suppression techniques is indicated by [a] protocol indicator; and "processing data transmitted by the cable modem during said allocated transmission opportunity in accordance with said default header suppression technique if support for said default header suppression technique is indicated by said protocol indicator." As discussed above in regard to claim 1, Chapman is directed to a DOCSIS-based cable modem network that allows only a single type of header suppression or no header suppression and thus does not teach or suggest these features.

Since Chapman does not teach or suggest each and every feature of independent claim 21, it cannot anticipate that claim. Dependent claims 22 and 24-27 are likewise not anticipated by Chapman for the same reasons as independent claim 21 from which they depend and further in view of their own respective features. Accordingly, Applicants respectfully request that the rejection of claims 22 and 24-27 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

The Examiner has rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Chapman in view of U.S. Patent No. 6,765,925 to Sawyer ("Sawyer"). Sawyer does not in any way rectify the deficiencies of Chapman with respect to independent claim 6. Consequently, the combination of Chapman and Sawyer does not render obvious independent claim 6. Dependent claim 11 is likewise not rendered obvious by the combination of Chapman and Sawyer for the same reasons as independent claim 6 from which it depends and further in view of its own features. Accordingly, Applicants respectfully request that the rejection of claim 11 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

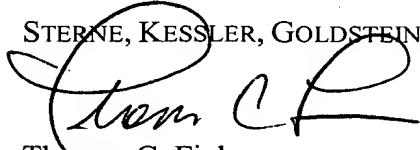
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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